Author index to volume 48

Allen, L.J., Electron energy loss spectroscopy in a crystalline environment using inner-shell ionization 48 (1993) 97
Allen, L.J. and C.J. Rossouw, Crystal potential determination by inversion for centrosymmetric crystals 48 (1993) 341
Aseev, A.L., see Latyshev 48 (1993) 377
Atamny, F., H. Kollmann, W. Bartl and R. Schlögl, Microstructure of nanocrystalline carbon allotropes: application of STM to loose particles 48 (1993) 281

Baker, T.S., see Belnap 48 (1993) 347
Balossier, G., see Michel 48 (1993) 121
Banzhof, H. and K.-H. Herrmann, Reflection electron holography 48 (1993) 475
Baró, A.M., see Méndez 48 (1993) 315
Bartl, W., see Atamny 48 (1993) 281
Belnap, D.M., W.D. Grochulski, N.H. Olson and T.S. Baker, Use of density plots to calibrate image magnification for frozen-hydrated specimens 48 (1993) 347
Bentley, J., see Wang 48 (1993) 465
Bird, D.M., see Mansfield 48 (1993) 1
Bøe, N., see Gjønnes 48 (1993) 37
Bomans, P.H.H., see Frederik 48 (1993) 107
Bonhomme, P., see Michel 48 (1993) 121
Bonnet, N., see Michel 48 (1993) 121
Booy, F.P. and J.B. Pawley, Cryo-crinkling: what happens to carbon films on copper grids at low temperature 48 (1993) 273

Cheng, S.C., see Egerton 48 (1993) 239
Ciliax, B.J., K.L. Kirk and R.D. Leapman, Radiation damage of fluorinated organic compounds measured by parallel electron energy loss spectroscopy 48 (1993) 13
Coene, W.M.J., see Otten 48 (1993) 77
Contrata, W., M.J. Mitchell and J.M. Mochel, Disordering of platinum clusters 48 (1993) 297
Cowley, J.M., see Liu 48 (1993) 381
Crozier, P.A. and M. Gajdardziska-Josifovska, Reflection electron energy-loss spectroscopy studies of Ca segregation on MgO (100) surfaces 48 (1993) 63
Crozier, P.A., see Pan 48 (1993) 332

Dargahi, R., see Schmid 48 (1993) 251
Davies, M.C., see Wilkins 48 (1993) 197
Davies, M.C., see Roberts 48 (1993) 265
De Grooth, B.G., see Putman 48 (1993) 177
Du, A.Y., see Peng 48 (1993) 453

Egerton, R.F., Y.-Y. Yang and S.C. Cheng, Characterization and use of the Gatan 666 parallel-recording electron energy-loss spectrometer 48 (1993) 239
Endo, J., see Osakabe 48 (1993) 483
Ewing, R.C., see Miller 48 (1993) 203

Fanidis, C., D. Van Dyck and J. Van Landuyt, Inelastic scattering of high-energy electrons in a crystal in thermal equilibrium with the environment. II. Solution of the equations and applications to concrete cases 48 (1993) 133
Fink, H.-W., see Shedd 48 (1993) 43
Fisher, A.T., see Wang 48 (1993) 183
Frederik, P.M., P.H.H. Bomans and M.C.A. Stuart, Matrix effects and the induction of mass loss or bubbling by the electron beam in vitrified hydrated specimens 48 (1993) 107

Gajdardziska-Josifovska, M., see Crozier 48 (1993) 63
Gjønnes, K., N. Bøe and J. Taftø, Distribution of holes in $YBa_2Cu_3O_7$ from convergent beam electron diffraction 48 (1993) 37
Gómez-Herrero, J., see Méndez 48 (1993) 315
Greve, J., see Putman 48 (1993) 177
Grochulski, W.D., see Belnap 48 (1993) 347

Hansma, P.K., see Putman 48 (1993) 177
Hao, H.W., see Méndez 48 (1993) 315
Herrmann, K.-H., see Banzhof 48 (1993) 475
Ho, R., see Zhao 48 (1993) 290
Horio, Y., see Ichimiya 48 (1993) 425
Howitt, D.G., see Medlin 48 (1993) 93
Hsu, T. and L.-M. Peng, Bibliography of REM 48 (1993) 489

Ichikawa, M., see Nakahara 48 (1993) 417
Ichimiya, A., S. Kohmoto, H. Nakahara and Y. Horio, Theory of RHEED and application to surface structure studies 48 (1993) 425

Elsevier Science Publishers B.V.

Jiang, J., see Peng 48 (1993) 453

Kirk, K.L., see Ciliax 48 (1993) 13
Kirkland, A.I., see Tang 48 (1993) 321
Kohmoto, S., see Ichimiya 48 (1993) 425
Kollmann, H., see Atamny 48 (1993) 281
Krasilnikov, A.B., see Latyshev 48 (1993) 377
Kuo, K.H., see Peng 48 (1993) 367

Latyshev, A.V., A.B. Krasilnikov and A.L. Aseev, In situ REM study of monatomic step behaviour on Si(111) surface during sublimation 48 (1993) 377
Leapman, R.D., see Ciliax 48 (1993) 13
Lehmpfuhl, G. and Y. Uchida, REM studies of surface crystallography 48 (1993) 445
Liu, J. and J.M. Cowley, Scanning reflection electron microscopy and associated techniques for surface studies 48 (1993) 381
Lo, W.K. and J.C.H. Spence, Investigation of STM image artifacts by in-situ reflection electron microscopy 48 (1993) 433

Mansfield, J., D.M. Bird and M. Saunders, Thickness dependence of higher-order Laue zone line positions at strongly dynamic zone axes 48 (1993) 1
Matsuda, T., see Osakabe 48 (1993) 483
McCallum, B.C., see Rodenburg 48 (1993) 304
Medlin, D.L. and D.G. Howitt, Rapid technique for detecting and correcting signal variation during microanalysis 48 (1993) 93
Méndez, J., J. Gómez-Herrero, H.W. Hao and A.M. Baró, Scanning tunneling microscope for ultra-high vacuum with a high-precision coarse positioning 48 (1993) 315
Michel, J., N. Bonnet, D. Wagner, G. Balossier and P. Bonhomme, Optimization of digital filters for the detection of trace elements in electron energy loss spectroscopy. II. Experiments 48 (1993) 121
Miller, M.L. and R.C. Ewing, Image simulation of partially amorphous materials 48 (1993) 203
Minoda, H. and K. Yagi, REM studies of surface dynamics: growth of Ge on Au-deposited Si(111) surfaces 48 (1993) 371
Mitchell, J.R., see Wilkins 48 (1993) 197
Mitchell, M.J., see Contrata 48 (1993) 297
Mochel, J.M., see Contrata 48 (1993) 297

Nakahara, H., M. Ichikawa and S. Stoyanov, Microprobe RHEED and SREM studies of Si MBE on Ga-adsorbed Si(111) surface 48 (1993) 417

Ohno, T., Intensity changes induced by beam damage in electron diffraction from behenic acid multiple monolayers 48 (1993) 359
Olson, N.H., see Belnap 48 (1993) 347
Osakabe, N., T. Matsuda, J. Endo and A. Tonomura, Reflection electron holographic observation of surface displacement field 48 (1993) 483
Otten, M.T. and W.M.J. Coene, High-resolution imaging on a field emission TEM 48 (1993) 77

Pan, M. and P.A. Crozier, Low-dose high-resolution electron microscopy of zeolite materials with a slow-scan CCD camera 48 (1993) 332
Pawley, J.B., see Booy 48 (1993) 273
Peng, L.-M. and K.H. Kuo, Foreword to Reflection Electron Microscopy 48 (1993) 367
Peng, L.-M., A.Y. Du, J. Jiang and J.X. Zhou, Reflection electron imaging of semiconductor multilayer materials 48 (1993) 453
Peng, L.-M., see Hsu 48 (1993) 489
Perovic, D.D., see Rossouw 48 (1993) 49
Putman, C.A.J., B.G. de Grooth, P.K. Hansma, N.F. van Hulst and J. Greve, Immunogold labels: cell-surface markers in atomic force microscopy 48 (1993) 177

Roberts, C.J., see Wilkins 48 (1993) 197
Roberts, C.J., M.C. Davies, D.E. Jackson and S.J.B. Tendler, Controlled surface damage using a scanning tunnelling microscope on platinum and platinum-carbon films and the in-situ correction of tip defects 48 (1993) 265
Rodenburg, J.M., B.C. McCallum and P.D. Nellist, Experimental tests on double-resolution coherent imaging via STEM 48 (1993) 304
Rossouw, C.J. and D.D. Perovic, Dynamical LACBED analysis of Si/SiGe and Si/SiB multilayer structures 48 (1993) 49
Rossouw, C.J., see Allen 48 (1993) 341

Sasabe, H., see Toyoshima 48 (1993) 165
Saunders, M., see Mansfield 48 (1993) 1
Schlögl, R., see Atamny 48 (1993) 281
Schmid, H., see Shedd 48 (1993) 43
Schmid, M.F., R. Dargahi and M.W. Tam, SPECTRA: a system for processing electron images of crystals 48 (1993) 251
Shao, Z., see Zhao 48 (1993) 290
Shedd, G.M., H. Schmid and H.-W. Fink, Building a micrometer-scale electrostatic lens by hand 48 (1993) 43
Somlyo, A.P., see Zhao 48 (1993) 290

Stokke, B.T., see Wilkins 48 (1993) 197
Stoyanov, S., see Nakahara 48 (1993) 417
Stuart, M.C.A., see Frederik 48 (1993) 107

Taftø, J., see Thölén 48 (1993) 27
Taftø, J., see Gjønnes 48 (1993) 37
Tam, M.W., see Schmid 48 (1993) 251
Tang, D., A.I. Kirkland and D.A. Jefferson, Optimisation of high-resolution image simulations. I. Image selection in real space 48 (1993) 321
Tendler, S.J.B., see Wilkins 48 (1993) 197
Tendler, S.J.B., see Roberts 48 (1993) 265
Thölén, A.R. and J. Taftø, Periodic buckling of the lattice planes in the thin regions of wedge-shaped crystals 48 (1993) 27
Tonomura, A., see Osakabe 48 (1993) 483
Toyoshima, C., K. Yonekura and H. Sasabe, Contrast transfer for frozen-hydrated specimens. II. Amplitude contrast at very low frequencies 48 (1993) 165

Uchida, Y., see Lehmpfuhl 48 (1993) 445

Van Dyck, D., see Fanidis 48 (1993) 133
Van Hulst, N.F., see Putman 48 (1993) 177
Van Landuyt, J., see Fanidis 48 (1993) 133

Wang, Z.L. and A.T. Fisher, Electron energy-loss spectroscopy of high-angle thermal-diffuse-scattered electrons in TEM 48 (1993) 183
Wang, Z.L. and J. Bentley, Determination of effective ionization cross-sections for quantitative surface chemical microanalysis using REELS 48 (1993) 465
Wilkins, M.J., M.C. Davies, D.E. Jackson, J.R. Mitchell, C.J. Roberts, B.T. Stokke and S.J.B. Tendler, Comparison of scanning tunnelling microscopy and transmission electron microscopy image data of a microbial polysaccharide 48 (1993) 197

Yagi, K., see Minoda 48 (1993) 371
Yang, Y.-Y., see Egerton 48 (1993) 239
Yonekura, K., see Toyoshima 48 (1993) 165

Zhao, L., Y.Y. Wang, R. Ho, Z. Shao, A.V. Somlyo and A.P. Somlyo, Thickness determination of biological thin sections by multiple-least-squares fitting of the carbon K-edge in the electron energy-loss spectrum 48 (1993) 290
Zhou, J.X., see Peng 48 (1993) 453

Subject index to volume 48

Analytical microscopy

Dynamical LACBED analysis of Si/SiGe and Si/SiB multilayer structures, *Rossouw and Perovic* 48 (1993) 49

Reflection electron energy-loss spectroscopy studies of Ca segregation on MgO (100) surfaces, *Crozier and Gajdardziska-Josifovska* 48 (1993) 63

Rapid technique for detecting and correcting signal variation during microanalysis, *Medlin and Howitt* 48 (1993) 93

Determination of effective ionization cross-sections for quantitative surface chemical microanalysis using REELS, *Wang and Bentley* 48 (1993) 465

Cross sections

Inelastic scattering of high-energy electrons in a crystal in thermal equilibrium with the environment. II. Solution of the equations and applications to concrete cases, *Fanidis, Van Dyck and Van Landuyt* 48 (1993) 133

Determination of effective ionization cross-sections for quantitative surface chemical microanalysis using REELS, *Wang and Bentley* 48 (1993) 465

Cryomicroscopy

Contrast transfer for frozen-hydrated specimens. II. Amplitude contrast at very low frequencies, *Toyoshima, Yonekura and Sasabe* 48 (1993) 165

Cryo-crinkling: what happens to carbon films on copper grids at low temperature, *Booy and Pawley* 48 (1993) 273

Use of density plots to calibrate image magnification for frozen-hydrated specimens, *Belnap, Grochulski, Olson and Baker* 48 (1993) 347

Diffraction and optical diffraction

Thickness dependence of higher-order Laue zone line positions at strongly dynamic zone axes, *Mansfield, Bird and Saunders* 48 (1993) 1

Distribution of holes in $YBa_2Cu_3O_7$ from convergent beam electron diffraction, *Gjønnes, Bøe and Taftø* 48 (1993) 37

Dynamical LACBED analysis of Si/SiGe and Si/SiB multilayer structures, *Rossouw and Perovic* 48 (1993) 49

Electron energy loss spectroscopy

Radiation damage of fluorinated organic compounds measured by parallel electron energy loss spectroscopy, *Ciliax, Kirk and Leapman* 48 (1993) 13

Reflection electron energy-loss spectroscopy studies of Ca segregation on MgO (100) surfaces, *Crozier and Gajdardziska-Josifovska* 48 (1993) 63

Electron energy loss spectroscopy in a crystalline environment using inner-shell ionization, *Allen* 48 (1993) 97

Optimization of digital filters for the detection of trace elements in electron energy loss spectroscopy. II. Experiments, *Michel, Bonnet, Wagner, Balossier and Bonhomme* 48 (1993) 121

Inelastic scattering of high-energy electrons in a crystal in thermal equilibrium with the environment. II. Solution of the equations and applications to concrete cases, *Fanidis, Van Dyck and Van Landuyt* 48 (1993) 133

Electron energy-loss spectroscopy of high-angle thermal-diffuse-scattered electrons in TEM, *Wang and Fisher* 48 (1993) 183

Characterization and use of the Gatan 666 parallel-recording electron energy-loss spectrometer, *Egerton, Yang and Cheng* 48 (1993) 239

Thickness determination of biological thin sections by multiple-least-squares fitting of the carbon K-edge in the electron energy-loss spectrum, *Zhao, Wang, Ho, Shao, Somlyo and Somlyo* 48 (1993) 290

High resolution

Periodic buckling of the lattice planes in the thin regions of wedge-shaped crystals, *Thölén and Taftø* 48 (1993) 27

High-resolution imaging on a field emission TEM, *Otten and Coene* 48 (1993) 77

Optimisation of high-resolution image simulations. I. Image selection in real space, *Tang, Kirkland and Jefferson* 48 (1993) 321

Elsevier Science Publishers B.V.

Holography
Reflection electron holography, *Banzhof and Herrmann* 48 (1993) 475
Reflection electron holographic observation of surface displacement field, *Osakabe, Matsuda, Endo and Tonomura* 48 (1993) 483

Image processing, 3D reconstruction
Image simulation of partially amorphous materials, *Miller and Ewing* 48 (1993) 203
SPECTRA: a system for processing electron images of crystals, *Schmid, Dargahi and Tam* 48 (1993) 251
Optimisation of high-resolution image simulations. I. Image selection in real space, *Tang, Kirkland and Jefferson* 48 (1993) 321

Imaging
High-resolution imaging on a field emission TEM, *Otten and Coene* 48 (1993) 77
Experimental tests on double-resolution coherent imaging via STEM, *Rodenburg, McCallum and Nellist* 48 (1993) 304

Instrumentation
Building a micrometer-scale electrostatic lens by hand, *Shedd, Schmid and Fink* 48 (1993) 43
Scanning tunneling microscope for ultra-high vacuum with a high-precision coarse positioning, *Méndez, Gómez-Herrero, Hao and Baró* 48 (1993) 315

Methods and techniques
Rapid technique for detecting and correcting signal variation during microanalysis, *Medlin and Howitt* 48 (1993) 93
Controlled surface damage using a scanning tunnelling microscope on platinum and platinum-carbon films and the in-situ correction of tip defects, *Roberts, Davies, Jackson and Tendler* 48 (1993) 265
Thickness determination of biological thin sections by multiple-least-squares fitting of the carbon K-edge in the electron energy-loss spectrum, *Zhao, Wang, Ho, Shao, Somlyo and Somlyo* 48 (1993) 290
Low-dose high-resolution electron microscopy of zeolite materials with a slow-scan CCD camera, *Pan and Crozier* 48 (1993) 332
Crystal potential determination by inversion for centrosymmetric crystals, *Allen and Rossouw* 48 (1993) 341
Beinap, Grochulski, Olson and Baker 48 (1993) 347

New developments
Optimization of digital filters for the detection of trace elements in electron energy loss spectroscopy. II. Experiments, *Michel, Bonnet, Wagner, Balossier and Bonhomme* 48 (1993) 121

Radiation damage and contamination
Matrix effects and the induction of mass loss or bubbling by the electron beam in vitrified hydrated specimens, *Frederik, Bomans and Stuart* 48 (1993) 107
Intensity changes induced by beam damage in electron diffraction from behenic acid multiple monolayers, *Ohno* 48 (1993) 359

Reflection electron microscopy, reflection high-energy electron diffraction
REM studies of surface dynamics: growth of Ge on Au-deposited Si(111) surfaces, *Minoda and Yagi* 48 (1993) 371
In situ REM study of monatomic step behaviour on Si(111) surface during sublimation, *Latyshev, Krasilnikov and Aseev* 48 (1993) 377
Scanning reflection electron microscopy and associated techniques for surface studies, *Liu and Cowley* 48 (1993) 381
Microprobe RHEED and SREM studies of Si MBE on Ga-adsorbed Si(111) surface, *Nakahara, Ichikawa and Stoyanov* 48 (1993) 417
Theory of RHEED and application to surface structure studies, *Ichimiya, Kohmoto, Nakahara and Horio* 48 (1993) 425
Investigation of STM image artifacts by in-situ reflection electron microscopy, *Lo and Spence* 48 (1993) 433
REM studies of surface crystallography, *Lehmpfuhl and Uchida* 48 (1993) 445
Reflection electron imaging of semiconductor multilayer materials, *Peng, Du, Jiang and Zhou* 48 (1993) 453
Bibliography of REM, *Hsu and Peng* 48 (1993) 489

Scanning transmission electron microscopy
Experimental tests on double-resolution coherent imaging via STEM, *Rodenburg, McCallum and Nellist* 48 (1993) 304

Scanning tunneling microscopy
Immunogold labels: cell-surface markers in atomic force microscopy, *Putman, De Grooth, Hansma, Van Hulst and Greve* 48 (1993) 177

polysaccharide, *Wilkins, Davies, Jackson, Mitchell, Roberts, Stokke and Tendler* 48 (1993) 197
Controlled surface damage using a scanning tunnelling microscope on platinum and platinum-carbon films and the in-situ correction of tip defects, *Roberts, Davies, Jackson and Tendler* 48 (1993) 265
Microstructure of nanocrystalline carbon allotropes: application of STM to loose particles, *Atamny, Kollmann, Bartl and Schlögl* 48 (1993) 281
Scanning tunneling microscope for ultra-high vacuum with a high-precision coarse positioning, *Méndez, Gómez-Herrero, Hao and Baró* 48 (1993) 315
Investigation of STM image artifacts by in-situ reflection electron microscopy, *Lo and Spence* 48 (1993) 433

Surfaces, clusters, interfaces and particles
Immunogold labels: cell-surface markers in atomic force microscopy, *Putman, De Grooth, Hansma, Van Hulst and Greve* 48 (1993) 177
Controlled surface damage using a scanning tunnelling microscope on platinum and platinum-carbon films and the in-situ correction of tip defects, *Roberts, Davies, Jackson and Tendler* 48 (1993) 265
REM studies of surface dynamics: growth of Ge on Au-deposited Si(111) surfaces, *Minoda and Yagi* 48 (1993) 371
In situ REM study of monatomic step behaviour on Si(111) surface during sublimation, *Latyshev, Krasilnikov and Aseev* 48 (1993) 377
Scanning reflection electron microscopy and associated techniques for surface studies, *Liu and Cowley* 48 (1993) 381
Microprobe RHEED and SREM studies of Si MBE on Ga-adsorbed Si(111) surface, *Nakahara, Ichikawa and Stoyanov* 48 (1993) 417
Theory of RHEED and application to surface structure studies, *Ichimiya, Kohmoto, Nakahara and Horio* 48 (1993) 425
REM studies of surface crystallography, *Lehmpfuhl and Uchida* 48 (1993) 445
Determination of effective ionization cross-sections for quantitative surface chemical microanalysis using REELS, *Wang and Bentley* 48 (1993) 465
Reflection electron holographic observation of surface displacement field, *Osakabe, Matsuda, Endo and Tonomura* 48 (1993) 483

Abstracts / Announcements / Book reviews / Comments / Editorials / Reports
Foreword to Reflection Electron Microscopy, *Peng and Kuo* 48 (1993) 367